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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,539	10/24/2003	Dany Sylvain	7000-271A	2302

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EXAMINER

KIM, WESLEY LEO

ART UNIT	PAPER NUMBER
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2688

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/693,539	<b>Applicant(s)</b> SYLVAIN, DANY	
	<b>Examiner</b> Wesley L. Kim	<b>Art Unit</b> 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 8-17, 21-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abidi et al (U.S. Patent 6154650) in view of Schellinger et al (U.S. Patent 5260988).

**Regarding Claim 1 and 22**, Abidi teaches a) a wireline network interface (Col.2:66-67); b) a local wireless interface (Fig.1:54, i.e cordless base station) providing a communication zone (Fig.1:58) in which communications with a mobile terminal are possible (Col.3:63-65), the mobile terminal associated with a primary directory number (Col.3:33-36) and adapted to communicate with the local wireless interface to facilitate a call through a wireline network (Col.3:63-Col.4:6) and communicate with a wireless network to facilitate a call through the wireless network (Col.3:15-20); and c) a control system cooperating with the wireline network interface and the local wireless interface (Col.5:44-53, cordless base station) and adapted to: i) establish through the wireline network a first call involving the mobile terminal by communicating with the wireline network via the

wireline network interface (Col.5;44-53, cordless base station, more specifically, the processor) and communicating with the mobile terminal via the local wireless interface (i.e. cordless base station; the processor is a component of the cordless base station, therefore communicates with the mobile terminal via the local wireless interface); however Abidi **is silent on** ii) during the first call, detecting the mobile terminal moving out of the communication zone; and iii) initiate a transition of the first call being connected to the mobile terminal through the wireline network via the local wireless interface to the first call being connected to the mobile terminal through the wireless network using a temporary directory number.

Schellinger teaches during a call, detecting a mobile station moving out of the communication zone (Col.8;54-59, a skilled artisan knows that a mobile station moving out of a communication zone results in decreasing received signal quality); and initiate a transition of the first call being connected to the mobile terminal through the wireline network via the local wireless interface to the first call being connected to the mobile terminal through the wireless network using a temporary directory number (Col.8;29-34 and Col.8;44-48, the cellular leg of the 3 way call is the temporary directory number). To the examiner a directory number is a phone number or a number assigned to the mobile station.

Schellinger teaches that the cordless system would be preferred due the greater cost of using the cellular service (Col.3;32-34 and Col.9;40-46), so one of

ordinary skill in the art would envision the primary directory number to be the landline leg and the temporary directory number be the cellular leg.

To one of ordinary skill in the art, it would have been obvious to modify Abidi, such that the mobile terminal moving out of the communication zone is detected and the call is transitioned from the wire-line network to the wireless network using a temporary directory number, to provide a method of maintaining service quality and keeping service costs as low as possible.

**Regarding Claim 2 and 23**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Abidi teaches the mobile terminal is registered with the wireless network while the first call is established (Col.4:30-39, when the mobile is in the cellular region it is registered with the wireless network).

**Regarding Claim 3 and 24**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Schellinger teaches the control system (i.e. cordless base station) is further adapted to request the temporary directory number from the wireline network (Col.8:29-34, the control system is responsible for obtaining the temporary directory number, i.e. cellular phone number).

**Regarding Claim 4 and 25**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Schellinger teaches the transition is initiated by sending a message (Col.8:29-31, the request is a message) configured to initiate establishing a wireless network connection to the

mobile terminal through the wireless network using the temporary directory number associated with the mobile terminal (Col.8;29-34 and Col.8;44-48, the cellular phone number i.e. cellular leg is used to connect the mobile terminal through the wireless network); connecting the first call to the wireless network connection (Col.8;44-48), and dropping a wire-line network connection with the mobile terminal (Col.8;49-51, ends land-line leg).

**Regarding Claim 5**, the combination as discussed above teaches all the limitations as recited in claim 1, and Abidi teaches the wireline network interface is a traditional telephony line interface (Col.2;66-67).

**Regarding Claim 8 and 26**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22 , and Schellinger teaches the transition is initiated by sending a message (Col.8;30, i.e. request) intended for a wireline switch (Col.8;30-31, i.e. cordless base station) and configured to cause the wireline switch to transfer the first call (Col.8;31, i.e. handoff) to the mobile terminal through the wireless network using the temporary directory number (Col.8;29-34, i.e. users cellular telephone number). To the examiner a wireline switch could be a cordless base station. The base station is responsible for switching connection to the mobile station from a wireline network to a wireless network.

**Regarding Claim 9 and 27**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Schellinger teaches the transition is initiated by sending a message (Col.8;30, i.e. request) intended for a

wireline switch (Col.8;30-31, i.e. cordless base station) and configured to cause the wireline switch to establish a three-way call (Col.8;32-34) based on the first call to the mobile terminal through the wireless network using the temporary directory number (Col.8;29-34, i.e. users cellular telephone number). To the examiner a wireline switch could be a cordless base station. The base station is responsible for switching connection to the mobile station from a wireline network to a wireless network.

**Regarding Claim 10 and 28**, the combination as discussed above teaches all the limitations as recited in claim 9 and 27, and Schellinger teaches the control system is further adapted to send a second message intended for the wireline switch and configured to instruct the wireline switch to drop a wireline network connection (Col.8;44-53, when the PCC answers the cellular leg of the three way call, one of ordinary skill in the art would envision a message is sent to the switch (i.e. cordless base station) so that it knows to end the landline leg of the three way call).

**Regarding Claim 11 and 29**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and wherein the mobile terminal is also associated with a wireline network directory number, such that incoming calls for the mobile terminal directed to the wireline network directory number are established via the wireline network (Col.6;43-46) and incoming calls for the mobile terminal directed to the temporary directory number are established via the wireless network (Col.6;61-63).

**Regarding Claim 12 and 30**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and the control system (i.e. processor) includes a signal processing function adapted to provide any necessary conversion of signals between the wireline network interface and the local wireless interface (Col.5:36-26-31, converter).

**Regarding Claim 13-16 and 31-34**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and the control system (i.e. processor) is adapted to detect the mobile terminal moving out of the communication zone by detecting a bit error rate, a degradation in quality, an inability to communicate with the mobile terminal, a decrease in signal strength associated with communications with the mobile terminal via the local wireless interface surpassing a defined threshold (Col.8:54-59, to one of ordinary skill in the art, it is obvious that handing off communications includes comparing the measured signal quality to a defined threshold).

**Regarding Claim 17 and 35**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Schellinger teaches the local wireless interface is adapted to support communications with the mobile terminal using cordless telephone technology (Fig.1:115).

**Regarding Claim 21 and 40**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, and Schellinger teaches the control system (Col.8:30, i.e. cordless base station) is further adapted to detect a signal (Col.8:31, i.e. request) from the mobile terminal (Col.8:29-34) and



initiate the transition of the first call being connected to the mobile terminal through the wireline network via the local wireless interface to the first call being connected to the mobile terminal through the wireless network (Col.8:29-50), the signal from the mobile terminal responsive to a user of the mobile terminal requesting the transition (Col.8:54-59).

2. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Abidi et al (U.S. Patent 6154650) and Schellinger et al (U.S. Patent 5260988) in further view of Thyssen (U.S. Pub 2002/0106028).

**Regarding Claim 6**, Abidi and Schellinger teach all the limitations as recited in claim 1, however the combination **is silent on** the wireline network interface being a voice over packet interface.

Thyssen teaches wireline networks may include voice over IP networks (Par.20). To one of ordinary skill it is obvious that the wireline network interface is a voice over packet interface.

To one of ordinary skill in the art, it would have been obvious to one of ordinary skill in the art to modify Abidi and Schellinger, such that the wireline network interface is a voice over packet interface, to provide a method of transmitting data over the internet and bypass the charges associated with a typical phone call.

3. Claim 7,20, and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Abidi et al (U.S. Patent 6154650) and Schellinger et al (U.S. Patent 5260988) in further view of Bell (U.S. Patent 6445921).

**Regarding Claim 7**, Abidi and Schellinger teaches all the limitations as recited in claim 1, however the combination **is silent on** the wireless network being one of the group consisting of TDM, CDMA, and OFDM.

Bell teaches a mobile station operable in a cellular network and a cordless base station region and the wireless network being of CDMA type (Col.2:34-44).

To one of ordinary skill in the art it would have been obvious to modify Abidi and Schellinger, such that the wireless network being one of the group consisting of TDM, CDMA, and OFDM, in order to provide wireless communications to a user.

**Regarding Claim 20 and 38**, the combination as discussed above teaches all the limitations as recited in claim 1 and 22, however the combination **is silent on** the local wireless interface is adapted to support communications with the mobile terminal using Bluetooth technology.

Bell teaches that the local wireless interface is adapted to support communication with the mobile terminal using Bluetooth technology (Col.2:38-44).

To one of ordinary skill in the art, it would have been obvious to modify Abidi and Schellinger, such that the local wireless interface is adapted to support communications with the mobile terminal using Bluetooth technology, to provide a low cost method of short range wireless voice and data links between devices.

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4. Claims 18,19,36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abidi et al (U.S. Patent 6154650) and Schellinger et al (U.S. Patent 5260988) in further view of Charney et al (U.S. Pub. 2004/0132485).

**Regarding Claim 18 and 36**, Abidi and Schellinger teach all the limitations as recited in claim 1 and 22, however the combination **is silent on** the local wireless interface is adapted to support communications with the mobile terminal using wireless local area network telephone technology.

Charney teaches a local wireless interface is adapted to support communications with the mobile terminal using wireless local area network telephone technology (Par.28).

To one of ordinary skill in the art it would have been obvious to modify Abidi and Schellinger, such that the local wireless interface is adapted to support communications with the mobile terminal using wireless local area network telephone technology, to provide a method of supporting simultaneous communications via a plurality of communication channels within the cordless telephone system.

**Regarding Claim 19 and 37**, the combination as discussed above teaches all the limitations as recited in claim 18 and 36, and Charney further teaches the wireless local area network technology is based on 802.11 standards (Par.28).

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5. Claim 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Abidi et al (U.S. Patent 6154650) and Schellinger et al (U.S. Patent 5260988) in further view of Bartle et al (U.S. Patent 5722068).

**Regarding Claim 39**, Abidi and Schellinger teach all the limitations as recited in claim 22, however the combination **is silent on** inserting a signal into a voice path for the first call prior to initiating the transition to warn parties to the first call of a transfer.

Bartle teaches inserting a signal into a voice path for the first call prior to initiating the transition to warn parties to the first call of a transfer (Abstract;3-9, and Abstract;14-15, and Abstract;25-31).

To one of ordinary skill in the art it would have been obvious to modify Abidi and Schellinger, such that a signal is inserted into a voice path for the first call prior to initiating the transition to warn parties to the first call of a transfer, to provide a method of notifying the user of an imminent communication mode change in a dual mode cellular telephone.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 5920815; Akhavan, Personal Phone Number System.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WLK

  
GEORGE ENG  
PRIMARY EXAMINER